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(71)出願人 000006507
横河電機株式会社
東京都武蔵野市中町2丁目9番32号
(72)発明者 高木 真人
東京都武蔵野市中町二丁目9番32号 横河
電機株式会社内
(72)発明者 井出 英人
東京都世田谷区千歳台6丁目16番1号 青
山学院大学理工学部内
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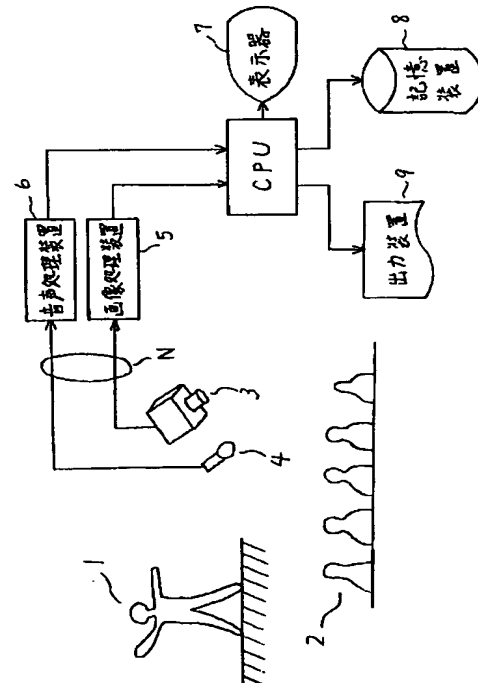5L096 BA08 CA02 HA09
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(54)【発明の名称】 公演評価システム

(57)【要約】

【課題】 公演、演奏等のできばえ、その結果を客観的に判定することができるようにすること。

【解決手段】 多数の聴衆の前で行われる公演の内容を評価する公演評価システムにおいて、前記聴衆の画像を撮影するカメラと、前記聴衆の音声を取得する集音マイクと、前記カメラからの映像情報及び前記集音マイクからの音声情報とを取り入れて予め設定しておいた映像パターン及び音声パターンと比較しその比較結果を前記公演の評価とする中央処理装置とを設けたことを特徴とする公演評価システム。
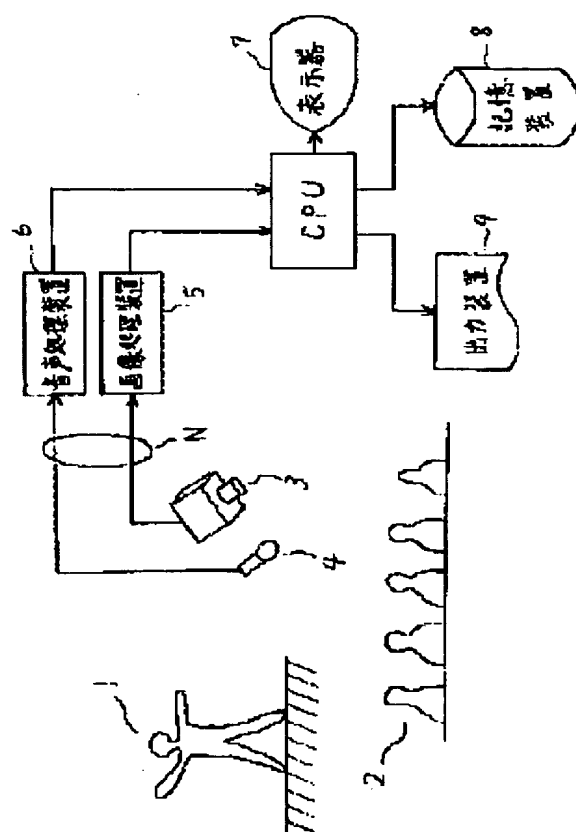
PUBLIC PERFORMANCE EVALUATION SYSTEM

Patent number:	JP2001266148
Publication date:	2001-09-28
Inventor:	TAKAGI MASATO; IDE HIDETO
Applicant:	YOKOGAWA ELECTRIC CORP
Classification:	
– international:	G06T7/00; G09B19/00; G10L15/00; G10L15/24
– european:	
Application number:	JP20000076228 20000317
Priority number(s):	

Abstract of JP2001266148

PROBLEM TO BE SOLVED: To objectively judge the workmanship and these results of a public performance, musical performance, etc.

SOLUTION: This public performance evaluation system for evaluating the contents of the public performance performed before a large number of audiences is provided with a camera for photographing the pictures of the audiences, a sound collecting microphone for obtaining the voice of the audiences and a CPU for fetching video information from the camera and voice information from the sound collecting microphone and comparing them with a voice pattern set in advance to obtain the comparing result as the evaluation of the public performance.

CLAIMS

[Claim(s)]

[Claim 1] The public performance evaluation system characterized by forming the
camera which photos the aforementioned audience's picture, and the central processing
unit which considers the comparison result as evaluation of the aforementioned public
performance as compared with the image pattern which took in the image information
from the aforementioned camera and was set up beforehand in the public performance
evaluation system by which the content of the public performance performed in front of
many audiences is evaluated.

[Claim 2] The public performance evaluation system characterized by forming the
sound-collecting microphone which acquires the aforementioned audience's voice, and
the central processing unit which considers the comparison result as evaluation of the
aforementioned public performance as compared with the voice pattern which took in
the speech information from the aforementioned sound-collecting microphone, and was
set up beforehand in the public performance evaluation system by which the content of
the public performance performed in front of many audiences is evaluated.

[Claim 3] The public performance evaluation system carry out having prepared the
central processing unit which considers the comparison result as evaluation of the
aforementioned public performance as compared with the image pattern and the voice
pattern which took in the camera which photos the aforementioned audience's picture,
the sound-collecting microphone which acquire the aforementioned audience's voice,
and the image information from the aforementioned camera and the speech information
from the aforementioned sound-collecting microphone in the public performance
evaluation system by which the content of the public performance performed in front of
many audiences evaluates, and set up beforehand as the feature.

[Claim 4] The aforementioned camera is a public performance evaluation system
according to claim 1 or 3 characterized by being a pan tilt formula camera.

[Claim 5] The aforementioned camera and the aforementioned sound-collecting microphone are a public performance evaluation system according to claim 3 or 4 characterized by being one apparatus.

[Translation done.]

DETAILED DESCRIPTION

[Detailed Description of the Invention]
[0001]
[The technical field to which invention belongs] this invention relates to the public performance evaluation system by which the public performance for a lot of people, such as a public performance meeting by the lecture in educational facilities, such as a university and a preparatory school, a lesson or the lecture meeting by the famous man, the entertainer, and the musician, is evaluated.
[0002]
[Description of the Prior Art] If the lecture and lesson in educational facilities which described above, such as a university and a preparatory school, or the lecture meeting by the famous man, the public performance meeting by the entertainer and the musician, etc. are in the public performance for a lot of people, performance, etc., relay with television or radio, video videotape recording, etc. are performed frequently. Furthermore, the lecture package by the professor of a famous university, the famous preparatory school teacher, etc. may be relayed and distributed also to a remote place by television or video.
[0003]
[Problem(s) to be Solved by the Invention] Anyway, it could not but be a way stage for a system being built by making into a subject the side given a lecture on and performed,

being processed as noise, if it says which are voice, such as an image by the side of an audience or applause, and a cheer, and heaping up a lecture and a performance. However, if recently comes, demand whether performance, such as a lecture of a lecturer and a player and a performance, can be measured with a certain means comes to occur, and although the technique by the opinion from an audience person or the questionnaire is common, to this There are problems, like the subjectivity by the side of an audience to which complicatedness and a measurement size are restricted for the method of an opinion interview enters, and performance of a lecture and a performance was not able to be judged in third person.

[0004] this invention makes it a technical problem to solve the above problems, and aims at offering the system which can consider the result of a lecture and a performance and can judge the reaction by the side of an audience for it objective.

[0005]

[Means for Solving the Problem] this invention which attains such a technical problem is as follows.

(1) The public performance evaluation system characterized by forming the camera which photos the aforementioned audience's picture, and the central processing unit which considers the comparison result as evaluation of the aforementioned public performance as compared with the image pattern which took in the image information from the aforementioned camera and was set up beforehand in the public performance evaluation system by which the content of the public performance performed in front of many audiences is evaluated.

(2) The public performance evaluation system characterized by forming the sound-collecting microphone which acquires the aforementioned audience's voice, and the central processing unit which considers the comparison result as evaluation of the aforementioned public performance as compared with the voice pattern which took in the speech information from the aforementioned sound-collecting microphone, and was set up beforehand in the public performance evaluation system by which the content of the public performance performed in front of many audiences is evaluated.

(3) The public performance evaluation system carry out having prepared the central processing unit which considers the comparison result as evaluation of the aforementioned public performance as compared with the image pattern and the voice pattern which took in the camera which photos the aforementioned audience's picture, the sound-collecting microphone which acquire the aforementioned audience's voice, and the image information from the aforementioned camera and the speech information from the aforementioned sound-collecting microphone in the public performance

evaluation system by which the content of the public performance performed in front of many audiences evaluates, and set up beforehand as the feature.

(4) The aforementioned camera is a public performance evaluation system (1) characterized by being a pan tilt formula camera, or given in (3).

(5) The aforementioned camera and the aforementioned sound-collecting microphone are a public performance evaluation system (3) characterized by being one apparatus, or given in (4).

[0006]

[Embodiments of the Invention] Hereafter, a drawing explains this invention in detail. It is shown in drawing 1 , and while the public performance persons 1, such as a lecturer, a player, a professor of a university, and an entertainer, perform a lecture and a performance like usually, they install the camera 3 which photos the expression of an audience's 2 face, and an attitude, and the sound-collecting microphone 4 which acquires the voice from an audience 2 to the audiences 2, such as a candidate and a spectator.

[0007] The image of the camera 3 which is photoing the audience 2 is transmitted to an image processing system 5 through Network N, and an image processing is performed here. That is, whether it listening attentively eagerly and a state are recognized by the operator during a nap, a looking-down state, and a private talk from the expression of the face of the person who constitutes an audience 2. Or the pattern etc. is beforehand registered during the nap pattern to two or more kinds of picture patterns, i.e., an individual, or two or more persons, a looking-down pattern, a private talk pattern, and attendance at a lecture, and the person concerned or two or more persons' present attendance-at-a-lecture condition is recognized as compared with the obtained image information. Whole grasp is easy for it, if a camera 3 does not photo only a fixed part, but it is made into a pan tilt formula and the whole audience is photoed.

[0008] Furthermore, the voice from the sound-collecting microphone 4 is transmitted to a speech processing unit 6 through Network N, the size of applause, a cheer, and the level of a private talk are caught, and an audience's concentration degree is recognized by the operator with the voice level, a spectrum, etc. Or two or more kinds of voice patterns are registered beforehand, and an audience's 2 attendance-at-a-lecture condition is recognized as compared with the obtained speech information.

[0009] In fact, composition, then an image and voice can really be simultaneously acquired for a camera 3 and a microphone 4, and information can be acquired finely.

[0010] Furthermore, transmit the information from an image processing system 5 and a speech processing unit 6 mentioned above to a central processing unit CPU, and it sets

to a central processing unit CPU. The comparative-evaluation pattern defined beforehand, i.e., the nap number obtained from an image processing system 8, the looking-down number, the sideways number, the idle-talk number, etc. are counted. for example, further Operation of memorandum entry etc., nap operation, looking-down operation, sideways operation, idle-talk operation, voice SUBEKUTORU, etc. compare the behavior pattern which defined image information and speech information beforehand. by matching of a fixed number or a behavior pattern It considers as the index by which the performance of a public performance of the public performance person concerned is evaluated. As a result, evaluation of a public performance person is also computable.

[0011] You may make it make a drop 7 make display it or output the result of this evaluation to the output units 9, such as the storage 8, such as a disk, and a printer.

[0012]

[Effect of the Invention] According to this invention of a claim 1 to the claim 5, since the reaction by the side of an audience can be mechanically incorporated for situations, such as a lecture and a performance, with the voice from the image or sound-collecting microphone from a camera, performance, such as a public performance and a performance, and the effect that the result can be judged objective in third person can be acquired.

[Translation done.]

TECHNICAL FIELD

[The technical field to which invention belongs] this invention relates to the public performance evaluation system by which the public performance for a lot of people, such

as a public performance meeting by the lecture in educational facilities, such as a university and a preparatory school, a lesson or the lecture meeting by the famous man, the entertainer, and the musician, is evaluated.

[Translation done.]

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PRIOR ART

[Description of the Prior Art] If the lecture and lesson in educational facilities which described above, such as a university and a preparatory school, or the lecture meeting by the famous man, the public performance meeting by the entertainer and the musician, etc. are in the public performance for a lot of people, performance, etc., relay with television or radio, video videotape recording, etc. are performed frequently. Furthermore, the lecture package by the professor of a famous university, the famous preparatory school teacher, etc. may be relayed and distributed also to a remote place by television or video.

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EFFECT OF THE INVENTION

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[Effect of the Invention] According to this invention of a claim 1 to the claim 5, since the reaction by the side of an audience can be mechanically incorporated for situations, such as a lecture and a performance, with the voice from the image or sound-collecting microphone from a camera, performance, such as a public performance and a performance, and the effect that the result can be judged objective in third person can be acquired.

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[Translation done.]

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TECHNICAL PROBLEM

___

[Problem(s) to be Solved by the Invention] Anyway, it could not but be a way stage for a system being built by making into a subject the side given a lecture on and performed, being processed as noise, if it says which are voice, such as an image by the side of an audience or applause, and a cheer, and heaping up a lecture and a performance. However, if recently comes, demand whether performance, such as a lecture of a lecturer and a player and a performance, can be measured with a certain means comes to occur, and although the technique by the opinion from an audience person or the questionnaire is common, to this There are problems, like the subjectivity by the side of an audience to which complicatedness and a measurement size are restricted for the

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method of an opinion interview enters, and performance of a lecture and a performance was not able to be judged in third person.

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MEANS

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(1) The public performance evaluation system characterized by forming the camera which photos the aforementioned audience's picture, and the central processing unit which considers the comparison result as evaluation of the aforementioned public performance as compared with the image pattern which took in the image information from the aforementioned camera and was set up beforehand in the public performance evaluation system by which the content of the public performance performed in front of many audiences is evaluated.

(2) The public performance evaluation system characterized by forming the sound-collecting microphone which acquires the aforementioned audience's voice, and the central processing unit which considers the comparison result as evaluation of the aforementioned public performance as compared with the voice pattern which took in the speech information from the aforementioned sound-collecting microphone, and was set up beforehand in the public performance evaluation system by which the content of the public performance performed in front of many audiences is evaluated.

(3) The public performance evaluation system carry out having prepared the central processing unit which considers the comparison result as evaluation of the aforementioned public performance as compared with the image pattern and the voice pattern which took in the camera which photos the aforementioned audience's picture, the sound-collecting microphone which acquire the aforementioned audience's voice, and the image information from the aforementioned camera and the speech information from the aforementioned sound-collecting microphone in the public performance evaluation system by which the content of the public performance performed in front of many audiences evaluates, and set up beforehand as the feature.

(4) The aforementioned camera is a public performance evaluation system (1) characterized by being a pan tilt formula camera, or given in (3).

(5) The aforementioned camera and the aforementioned sound-collecting microphone are a public performance evaluation system (3) characterized by being one apparatus, or given in (4).

[0006]

[Embodiments of the Invention] Hereafter, a drawing explains this invention in detail. It is shown in drawing 1 , and while the public performance persons 1, such as a lecturer, a player, a professor of a university, and an entertainer, perform a lecture and a performance like usually, they install the camera 3 which photos the expression of an audience's 2 face, and an attitude, and the sound-collecting microphone 4 which acquires the voice from an audience 2 to the audiences 2, such as a candidate and a spectator.

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[Translation done.]

DESCRIPTION OF DRAWINGS

[Brief Description of the Drawings]

[Drawing 1] It is the schematic diagram of the equipment monitoring & control system

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concerning this invention.

[Description of Notations]

1 Public Performance Person

2 Audience

3 Camera

4 Sound-collecting Microphone

5 Image Processing System

6 Speech Processing Unit

7 Drop

8 Storage

9 Output Unit

CPU Central processing unit

[Translation done.]

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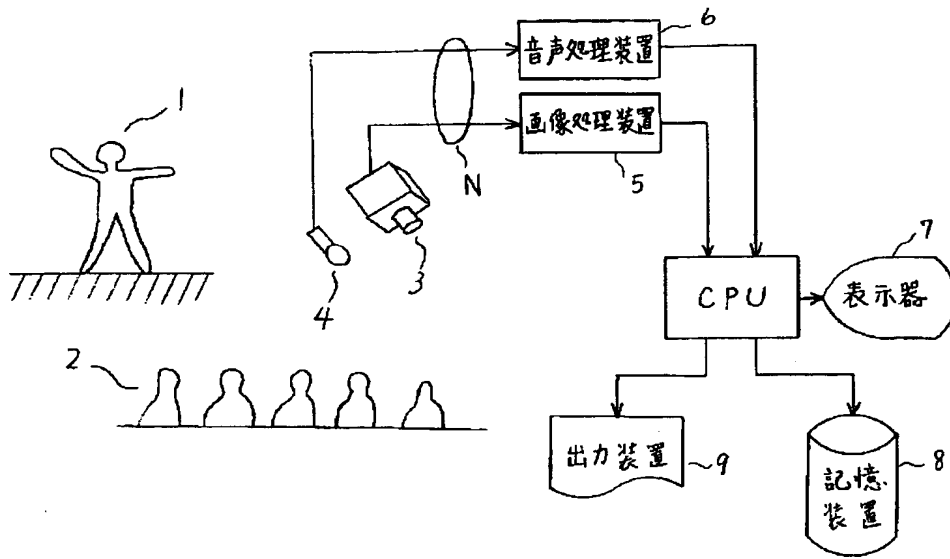
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DRAWINGS

[Drawing 1]

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